

IN THE CLAIMS

Amend the claims as indicated below by the markings. Cancel claims 9, 18, 19, 20, and 40 - 48 without prejudice.

Claims 1 - 4. (Cancelled)

5. (Currently Amended) The transgenic mutant mouse according to claim 33 ~~[[1]]~~, wherein the genome of the transgenic mutant mouse comprises a transgene within the disrupted region introduced in the endogenous Sigma-1 receptor gene that comprises a sequence encoding a positive selection marker.

Claims 6 -16. (Cancelled)

17. (Currently Amended) An isolated cell from a transgenic mouse, deficient in an endogenous Sigma-1 receptor, according to claim 33 ~~[[1]]~~, or its offspring.

Claims 18 – 27. (Cancelled)

28. (Currently Amended) The cell according to claim 17 ~~[[19]]~~ wherein the cell is immortalized.

Claims 29 - 32. (Cancelled)

33.(Currently Amended) A transgenic mutant mouse ~~,comprising a mouse~~ whose genome ~~comprises~~ includes a mutation ~~that disrupts the~~ having a disruption in a gene of an endogenous Sigma-1 receptor, ~~and the transgenic mutant mouse when~~ said gene disruption giving rise to a fertile homozygous ~~for said mutation lacks~~ transgenic mutant mouse lacking detectable levels of endogenous Sigma-1 receptor ~~and has~~ ,said transgenic mutant mouse having a phenotype characterized by a statistical difference in hyperactivity response compared to wild-type control wild mice.

34. (Currently Amended) A transgenic mutant mouse as claimed in claim 33, wherein said transgenic mutant mouse is obtainable by the use of the vector identified as pHR53TK that is deposited in the CECT under access number CECT 5737, to insert a functional disruption in the endogenous Sigma-1 receptor.

Claim 35.and 36. (Cancelled)

37.(Currently Amended) A transgenic mutant mouse wherein said transgenic mutant mouse is an offspring of a transgenic mutant mouse according to claim 33 and is homozygous for the mutation in the endogenous Sigma-1 receptor.

38.(Previously Presented) A transgenic mutant mouse as claimed in claim 33, wherein the genome of the transgenic mutant mouse comprises a transgene within the mutation introduced in the endogenous Sigma-1 receptor gene that comprises a gene encoding a positive or negative selection marker.

39.(Previously Presented) A transgenic mutant mouse as claimed in claim 38, wherein said transgene comprises the neomycin phototransferase (neo) gene.

Claims 40.- 48 (Cancelled)